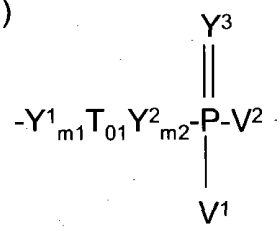
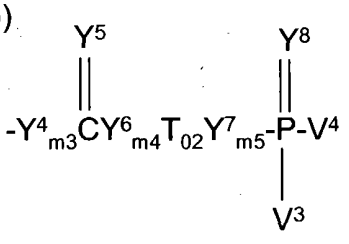
IN THE CLAIMS:

1. – 17. (Cancelled):

18. (New): A method of treating inflammatory conditions comprising administering to a mammal in need thereof an effective amount of a cyclic compound selected from the group consisting of cyclopentane, cyclohexane, cycloheptane, monosaccharide, disaccharide, trisaccharide, tetrasaccharide, piperidine, tetrahydrothiopyran, 5-oxotetrahydrothiopyran, 5,5-dioxotetrahydrothiopyran, tetrahydroselenopyran, tetrahydrofuran, pyrrolidine, tetrahydrothiophene, 5-oxotetrahydrothiophene, 5,5-dioxotetrahydrothiophene, tetrahydroselenophene, benzene, cumene, mesitylene, naphthalene and phenanthrene, in which said cyclic compound is substituted by at least three vicinal phosphorus containing radicals of the formula:

a)  or b) 

wherein

V^1 to V^4 are independently $Y^8{}_{m6}T_{o3}U$;

T_{01} to T_{03} are independently $(CH_2)_n$, CH=CH, or $CH_2CH=CHCH_2$;

o1 to o3 are independently 0 or 1;

n is 0 to 4;

U is $R^1Y^9 m_7$, $CY^{10}Y^{11}R^2$,$SY^{12}Y^{13}Y^{14}R^3$,$PY^{15}Y^{16}Y^{17}R^4R^5$,

$Y^{18}PY^{19}Y^{20}Y^{21}R^6R^7$, CH_2NO_2, $NHSO_2R^8$, or $NHCY^{22}Y^{23}R^9$;

m1 to m7 are independently 0 or 1;

Y^1 to Y^{23} are independently NR^{10}, NOR^{11}, O, or S;

and where R^1 to R^{11} are independently

i) hydrogen;

ii) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms;

iii) a saturated, unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon atoms and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur;

iv) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms substituted with a saturated or unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur;

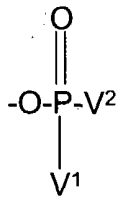
v) an aromatic or non-aromatic homo-or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur which aromatic or non-aromatic homo-or heterocyclic group is substituted with a straight or branched saturated or unsaturated group containing 1-22 carbon atoms;

whereby

said groups in ii-v are unsubstituted or are substituted by 1-6 of the following groups: hydroxy, alkoxy, aryloxy, acyloxy, carboxy, alkoxycarbonyl, alkoxycarbonyloxy, aryloxycarbonyl, aryloxycarbonyloxy, carbamoyl, fluoro, chloro, bromo, azido, cyano, oxo, oxa, amino, imino, alkylamino, arylamino, acylamino, arylazo, nitro, alkylthio or alkylsulfonyl.

19. (New): The method according to Claim 18 wherein the inflammatory conditions is rheumatoid arthritis.

20. (New): The method according to Claim 18 or 19 wherein the phosphorus-containing radicals have the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

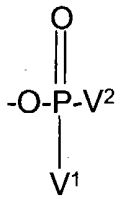
p is 1 to 4.

21. (New): The method according to Claim 18 or 19 wherein the phosphorus-containing radicals are phosphate groups.

22. (New): The method according to Claim 18 or 19 wherein the cyclic compound is a monosaccharide.

23. (New): The method according to Claim 22 wherein the monosaccharide is D/L-ribose, D/L-arabinose, D/L-xylose, D/L-lyxose, D/L-allose, D/L-altrose, D/L-glucose, D/L-mannose, D/L-gulose, D/L-idose, D/L-galactose, D/L-talose, D/L-ribulose, D/L-xylulose, D/L-psicose, D/L-sorbose, D/L-tagatose, or D/L-fructose.

24. (New): The method according to Claim 22 wherein the monosaccharide is substituted with three phosphorus-containing radicals having the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

p is 1 to 4.

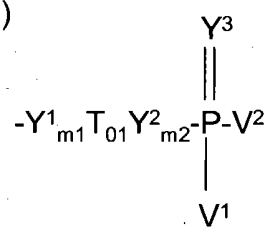
25. (New): The method according to Claim 24 wherein the phosphorous containing radicals are phosphate groups.

26. (New): The method according to Claim 18 or 19 wherein the cyclic compound administered to the mammal is selected from the group consisting of mannose-2,3,4-trisphosphate, rhamnose-2,3,4-trisphosphate, galactose- 2,3,4-trisphosphate, methyl-6-O-butyl-α-D-mannopyranoside-2,3,4-trisphosphate, 1,5-anhydro-D-arabinitol-2,3,4-trisphosphate, fructose-2,3,4-trisphosphate, 1,2-O-ethylene-β-D-fructopyranoside-2,3,4-trisphosphate, cyclohexane-1,2,3-triol trisphosphate, 1,5-dideoxy-1,5-iminoarabinitol-2,3,4-trisphosphate, altrose-2,3,4-trisphosphate, or methyl-6-O-butyl-α-D-altropyranoside 2,3,4-trisphosphate.

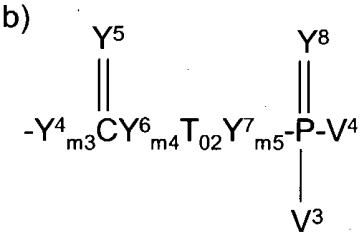
27. (New): The method according to Claim 18 or 19 wherein the compound is administered by parenteral or non-parenteral administration.

28. (New): The method according to Claim 18 or 19 wherein the effective amount ranges from about 0.1 to about 100 mg per kg body weight of the mammal.

29. (New): A method of treating tissue repair conditions comprising administering to a mammal in need thereof an effective amount of a cyclic compound selected from the group consisting of cyclopentane, cyclohexane, cycloheptane, inositol, monosaccharide, disaccharide, trisaccharide, tetrasaccharide, piperidine, tetrahydrothiopyran, 5-oxotetrahydrothiopyran, 5,5-dioxotetrahydrothiopyran, tetrahydroselenopyran, tetrahydrofuran, pyrrolidine, tetrahydrothiophene, 5-oxotetrahydrothiophene, 5,5-dioxotetrahydrothiophene, tetrahydroselenophene, benzene, cumene, mesitylene, naphthalene and phenanthrene, in which said cyclic compound is substituted by at least three vicinal phosphorus containing radicals of the formula:

a) 

or

b) 

wherein

V^1 to V^4 are independently $Y^8_{m6}T_{o3}U$;

T_{01} to T_{03} are independently $(CH_2)_n$, CH=CH, or $CH_2CH=CHCH_2$;

o1 to o3 are independently 0 or 1;

n is 0 to 4;

U is R^1Y^9 m_7, $CY^{10}Y^{11}R^2$,$SY^{12}Y^{13}Y^{14}R^3$,$PY^{15}Y^{16}Y^{17}R^4R^5$,

$Y^{18}PY^{19}Y^{20}Y^{21}R^6R^7$, CH_2NO_2, $NHSO_2R^8$, or $NHCY^{22}Y^{23}R^9$;

m1 to m7 are independently 0 or 1;

Y^1 to Y^{23} are independently NR^{10}, NOR^{11}, O, or S;

and where R^1 to R^{11} are independently

i) hydrogen;

ii) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms;

iii) a saturated, unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon atoms and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur;

iv) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms substituted with a saturated or unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur;

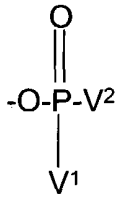
v) an aromatic or non-aromatic homo-or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur which aromatic or non-aromatic homo-or heterocyclic group is substituted with a straight or branched saturated or unsaturated group containing 1-22 carbon atoms;

whereby

said groups in ii-v are unsubstituted or are substituted by 1-6 of the following groups: hydroxy, alkoxy, aryloxy, acyloxy, carboxy, alkoxycarbonyl, alkoxycarbonyloxy, aryloxycarbonyl, aryloxycarbonyloxy, carbamoyl, fluoro, chloro, bromo, azido, cyano, oxo, oxa, amino, imino, alkylamino, arylamino, acylamino, arylazo, nitro, alkylthio or alkylsulfonyl.

30. (New): A method according to Claim 29 wherein the tissue repair condition is wound healing, matrix formation, collagen synthesis or scar formation.

31. (New): The method according to Claim 29 or 30 wherein the phosphorus-containing radicals have the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

p is 1 to 4.

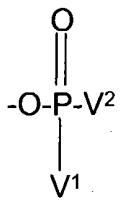
32. (New): The method according to Claim 29 or 30 wherein the phosphorus-containing radicals are phosphate groups.

33. (New): The method according to Claim 29 or 30 wherein the cyclic compound is a monosaccharide.

34. (New): The method according to Claim 33 wherein the monosaccharide is D/L-ribose, D/L-arabinose, D/L-xylose, D/L-lyxose, D/L-allose, D/L-altrose, D/L-glucose, D/L-mannose,

D/L-gulose, D/L-idose, D/L-galactose, D/L-talose, D/L-ribulose, D/L-xylulose, D/L-psicose, D/L-sorbose, D/L-tagatose, or D/L-fructose.

35. (New): The method according to Claim 33 wherein the monosaccharide is substituted with three phosphorus-containing radicals having the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

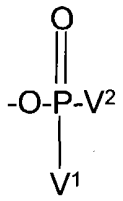
p is 1 to 4.

36. (New): The method according to Claim 35 wherein the phosphorous containing radicals is a phosphate group.

37. (New): The method according to Claim 29 or 30 wherein the cyclic compound is inositol.

38. (New): The method according to Claim 37 wherein the inositol is alloinositol, cisinositol, ipiinositol, D/L-chiroinositol, scylloinositol, myoinositol, mycoinositol or neoinositol.

39. (New): The method according to Claim 38 wherein the inositol is substituted with three phosphorus-containing radicals having the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

p is 1 to 4.

40. (New): The method according to Claim 35 wherein the phosphorous containing radicals are phosphate groups.

41. (New): The method according to Claim 29 or 30 wherein the cyclic compound administered to the mammal is selected from the group consisting of myoinositol-1,2,6-trisphosphate, mannose-2,3,4-trisphosphate, rhamnose-2,3,4-trisphosphate, galactose- 2,3,4-trisphosphate, methyl-6-O-butyl-α-D-mannopyranoside-2,3,4-trisphosphate, 1,5-anhydro-D-arabinitol-2,3,4-trisphosphate, fructose-2,3,4-trisphosphate, 1,2-O-ethylene-β-D-fructopyranoside-2,3,4-trisphosphate, cyclohexane-1,2,3-triol trisphosphate, 1,5-dideoxy-1,5-

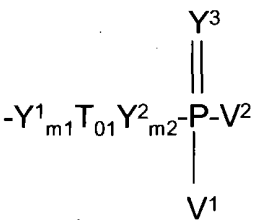
iminoarabinitol-2,3,4-trisphosphate, altrose-2,3,4-trisphosphate, or methyl-6-O-butyl-α-D-altropyranoside 2,3,4-trisphosphate.

42. (New): The method according to Claim 29 or 30 wherein the compound is administered by parenteral or non-parenteral administration.

43. (New): The method according to Claim 29 or 20 wherein the effective amount ranges from about 0.1 to about 100 mg per kg body weight of the mammal.

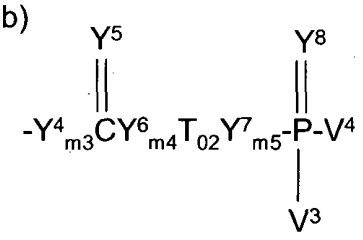
44. (New): A method of treating infectious conditions comprising administering to a mammal in need thereof an effective amount of a cyclic compound selected from the group consisting of cyclopentane, cyclohexane, cycloheptane, inositol, monosaccharide, disaccharide, trisaccharide, tetrasaccharide, piperidine, tetrahydrothiopyran, 5-oxotetrahydrothiopyran, 5,5-dioxotetrahydrothiopyran, tetrahydroselenopyran, tetrahydrofuran, pyrrolidine, tetrahydrothiophene, 5-oxotetrahydrothiophene, 5,5-dioxotetrahydrothiophene, tetrahydroselenophene, benzene, cumene, mesitylene, naphthalene and phenanthrene, in which said cyclic compound is substituted by at least three vicinal phosphorus containing radicals of the formula:

a)



or

b)



wherein

V^1 to V^4 are independently $Y^8{}_{m6}T_{o3}U$;

T_{01} to T_{03} are independently $(CH_2)_n$, CH=CH, or $CH_2CH=CHCH_2$;

o1 to o3 are independently 0 or 1;

n is 0 to 4;

U is $R^1Y^9\ m_7$, $CY^{10}Y^{11}R^2$, $SY^{12}Y^{13}Y^{14}R^3$, $PY^{15}Y^{16}Y^{17}R^4R^5$,

$Y^{18}PY^{19}Y^{20}Y^{21}R^6R^7$, CH_2NO_2, $NHSO_2R^8$, or $NHCY^{22}Y^{23}R^9$;

m1 to m7 are independently 0 or 1;

Y^1 to Y^{23} are independently NR^{10}, NOR^{11}, O, or S;

and where R^1 to R^{11} are independently

i) hydrogen;

ii) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms;

iii) a saturated, unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon atoms and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur;

iv) a straight or branched saturated or unsaturated alkyl group containing 1-22 carbon atoms substituted with a saturated or unsaturated aromatic or non-aromatic homo- or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur;

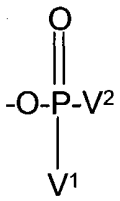
v) an aromatic or non-aromatic homo-or heterocyclic group containing 3-22 carbon and 0-5 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur which aromatic or non-aromatic homo-or heterocyclic group is substituted with a straight or branched saturated or unsaturated group containing 1-22 carbon atoms;

whereby

said groups in ii-v are unsubstituted or are substituted by 1-6 of the following groups: hydroxy, alkoxy, aryloxy, acyloxy, carboxy, alkoxycarbonyl, alkoxycarbonyloxy, aryloxycarbonyl, aryloxycarbonyloxy, carbamoyl, fluoro, chloro, bromo, azido, cyano, oxo, oxa, amino, imino, alkylamino, arylamino, acylamino, arylazo, nitro, alkylthio or alkylsulfonyl.

45. (New): A method according to Claim 44 wherein the infectious condition is trypanosomiasis.

46. (New): The method according to Claim 44 or 45 wherein the phosphorus-containing radicals have the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

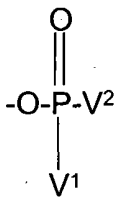
p is 1 to 4.

47. (New): The method according to Claim 44 or 45 wherein the phosphorus-containing radicals are phosphate groups.

48. (New): The method according to Claim 44 or 45 wherein the cyclic compound is a monosaccharide.

49. (New): The method according to Claim 48 wherein the monosaccharide is D/L-ribose, D/L-arabinose, D/L-xylose, D/L-lyxose, D/L-allose, D/L-altrose, D/L-glucose, D/L-mannose, D/L-gulose, D/L-idose, D/L-galactose, D/L-talose, D/L-ribulose, D/L-xylulose, D/L-psicose, D/L-sorbose, D/L-tagatose, or D/L-fructose.

50. (New): The method according to Claim 48 wherein the monosaccharide is substituted with three phosphorus-containing radicals having the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

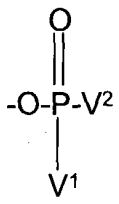
p is 1 to 4.

51. (New): The method according to Claim 50 wherein the phosphorous containing radicals are phosphate groups.

52. (New): The method according to Claims 44 or 45 wherein the cyclic compound is inositol.

53. (New): The method according to Claim 52 wherein the inositol is alloinositol, cisinositol, ipiinositol, D/L-chiroinositol, scylloinositol, myoinositol, mycoinositol or neoinositol.

54. (New): The method according to Claim 53 wherein the inositol is substituted with three phosphorus-containing radicals having the following formula:



wherein

V^1 and V^2 are OH, $(CH_2)_pOH$, COOH, $CONH_2$, CONOH, $(CH_2)_pCOOH$, $(CH_2)_pCONH_2$, $(CH_2)_pCONOH$, $(CH_2)_pSO_3H$, $(CH_2)_pSO_3NH_2$, $(CH_2)_pNO_2$, $(CH_2)_pPO_3H_2$, $O(CH_2)_pOH$, $O(CH_2)_pCOOH$, $O(CH_2)_pCONH_2$, $O(CH_2)_pCONOH$, $O(CH_2)_pSO_3H$, $O(CH_2)_pSO_3NH_2$, $O(CH_2)_pNO_2$, $O(CH_2)_pPO_3H_2$ or CF_2COOH; and

p is 1 to 4.

55. (New): The method according to Claim 54 wherein the phosphorous containing radicals is a phosphate group.

56. (New): The method according to Claim 44 or 45 wherein the cyclic compound administered to the mammal is selected from the group consisting of myoinositol-1,2,6-trisphosphate, mannose-2,3,4-trisphosphate, rhamnose-2,3,4-trisphosphate, galactose- 2,3,4-

trisphosphate, methyl-6-O-butyl-α-D-mannopyranoside-2,3,4-trisphosphate, 1,5-anhydro-D-arabinitol-2,3,4-trisphosphate, fructose-2,3,4-trisphosphate, 1,2-O-ethylene-β-D-fructopyranoside-2,3,4-trisphosphate, cyclohexane-1,2,3-triol trisphosphate, 1,5-dideoxy-1,5-iminoarabinitol-2,3,4-trisphosphate, altrose-2,3,4-trisphosphate, or methyl-6-O-butyl-α-D-altropyranoside 2,3,4-trisphosphate.

57. (New): The method according to Claim 44 or 45 wherein the compound is administered by parenteral or non-parenteral administration.

58. (New): The method according to Claim 44 or 45 wherein the growth factor modulating effective amount ranges from about 0.1 to about 100 mg per kg body weight of the mammal.